



SUPPORT FOR AMENDMENTS

Support for amended claims can be found in the specification at pp. 4, 16-19 and Example 1. This amendment contains no new matter. Claim 42 is canceled without prejudice to its further prosecution in divisional and/or continuation applications. Claims 1, 27-44, and 44-73 are active and pending in the application.

REMARKS

The present invention relates to the surprising discovery that the human 2-oxoglutarate carrier (OGC) is an uncoupling protein. Increased expression of OGC results in a decrease in the mitochondrial membrane potential in the cell. By analyzing expression of OGC, compounds that affect uncoupling can be identified. Such compounds would be used for treating metabolic diseases.

Rejection of claims under 35 U.S.C. § 112, second paragraph

The rejection of the claims as being indefinite under § 112, second paragraph has been obviated by amendment.

Rejection of claims under 35 U.S.C. § 112, first paragraph

The rejection of the claims 1, 27-42 and 44-73 under § 112, first paragraph is respectfully traversed. The claims include analyzing for expression of polypeptides having at least 90% sequence identity to polypeptides encoded by SEQ ID NO: 1 or 2. Analyzing for expression does not require making or selecting the polypeptides, only measuring their expression.

The specification provides a description of methods for measuring the expression of these polypeptides, such as with the use of antibodies specific to the polypeptides or the use of hybridization probes specific for the mRNAs that encode the polypeptides (*see* specification at pp. 11-12, 39-43, and 46-47 and Tables 1 and 2). Furthermore, the specification teaches how to make and use such reagents for the purposes of measuring expression of these polypeptides (*see* specification at pp. 11-12, 39-43, and 46-47). Finally, the specification informs one how to ascertain whether the polypeptide has at least 90% sequence identity with a polypeptide encoded by SEQ ID NO: 1 or 2 (*see* specification at pp. 5-6).

Analyzing for expression of polypeptides having at least 90% sequence identity to a polypeptide encoded by SEQ ID NO: 1 or 2 does not require making or selecting polypeptides having at least 90% sequence identity to a polypeptide encoded by SEQ ID NO: 1 or 2.


Applicants are NOT claiming these polypeptides; all the case law cited in the Office Action relates to situations where the applicant was claiming the polypeptides or polynucleotides. Accordingly, the present specification is fully enabled. Furthermore, the written description is adequate, since the specification describes analyzing for expression of these polypeptides, either with antibodies (which may be produced from the polypeptide encoded by SEQ ID NO: 1 or 2), or hybridization probes.

The rejection of the claim 59 under § 112, first paragraph has been obviated by amendment. Withdrawal of the grounds for rejection is respectfully requested.

Applicants submit that the application is in condition for allowance. Early notice of such action is respectfully requested.

SONNENSCHN NATH & ROSENTHAL LLP
P.O. Box #061080
Wacker Drive Station
Sears Tower
Chicago, Illinois 60606-1080

Respectfully submitted,


Daniel W. Celander, Ph.D.
Registration No. 52,710

Direct telephone calls to:

(312) 876-8071